# Ko63628

### Section 2 510(k) Summary of Safety and Effectiveness

Date: December 19, 2006

Submitter: GE Healthcare Integrated IT Solutions

540 W Northwest Highway

Barrington, IL 60010

Contact Person: Karen M. Lunde

Sr. Regulatory Affairs Leader

GE Healthcare Integrated IT Solutions

Phone: (847 277-6092 Fax: (414) 755-0655

<u>Device:</u> <u>Trade Name:</u> Centricity Radiology RA600 / Centricity Cardiology CA1000 /

Centricity Digital Hardcopy

Common/Usual Name: Picture Archiving and Communications Systems and Workstation

Classification Names: 21 CFR 892.2050 System, Image Processing, Radiological

Predicate Device: K042525 Centricity Radiology RA600 / Centricity Cardiology CA1000 /

Centricity Digital Hardcopy Workstation K023178 Innova 4100 (Specific features)

K023100 Accusketch Cardiac Quantitative System W/ Advanced

Analysis Components (Specific features)

<u>Device Description:</u> Centricity Radiology RA600 / Centricity Cardiology CA1000 /

Centricity Digital Hardcopy is a PC-based DICOM workstation platform which provides scaleable image and data management solutions for medical imaging. This software-based product provides capabilities for the acceptance, transmission, printing, display, storage, editing

DEC 2 6 2006

and digital processing of medical images and associated data.

RA600/CA1000 / Digital Hardcopy may be combined with a PACS network or connected directly to a modality through the use of DICOM networking. The RA600/CA1000 / Digital Hardcopy software application may be sold as a standalone product for use with 'off the shelf' PC hardware that meets minimum specifications or as a turnkey solution integrated with hardware components to be configured to meet the users specific needs.

RA600 / CA1000 / Digital Hardcopy can also provide the hardware and OS platform for a user to operate 3rd party software and/or other GE software applications such as RIS, voice recognition, or advanced imaging analysis, and view any data presented through those applications.

 $RA600\ /\ CA1000\ can$  act as an image repository for the Centricity Web Viewer application.

Targeted users of this system are trained professionals, including radiologists, cardiologists, physicians, technologists and nurses.

## KUL 3628

#### Intended Use:

RA600/CA1000/Digital Hardcopy is intended for viewing and diagnostic interpretation of images acquired from CT, MR, CR, DR, US, XA and other DICOM-compliant medical imaging systems when installed on suitable commercial-standard PC hardware. RA600 / CA1000 is intended for use as a primary diagnostic and analysis workstation in Radiology/ Cardiology or other departments. It is also intended for use as a clinical review workstation throughout the healthcare facility and may be part of a larger PACS configuration.

Digital Hardcopy is intended for use primarily as a workstation for the high volume burning of CDs or DVDs containing DICOM medical images and associated diagnostic report or analysis information. CD /DVD burning and disk labeling are done via a commercially available external robotics device.

RA600/CA1000/Digital Hardcopy receives imaging studies and data over LAN, WAN, intranet or internet from a PACS server or directly from a DICOM -compliant modality or archive utilizing both lossless and lossy compression. It is the user's responsibility to ensure quality, ambient light conditions and image compression ratios are consistent with the clinical application. The RA600/CA1000/Digital Hardcopy workstation may interface with various information systems within the healthcare environment, such as the HIS, RIS, and CVIS. It may be sold as software only, or as a turnkey system.

Lossy compressed mammographic images and digitized film screen images must not be reviewed for primary image interpretations. Mammographic images may only be interpreted using an FDA approved monitor that offers at least 5 Mpixel resolution and meets other technical specifications reviewed and accepted by FDA.

#### Technology:

The Centricity Radiology RA600 / Centricity Cardiology CA1000 / Centricity Digital Hardcopy employs the same functional scientific technology as its predicate devices.

#### Test Summary:

The Centricity Radiology RA600 / Centricity Cardiology CA1000 / Centricity Digital Hardcopy complies with the voluntary standards as detailed in Section 12 Specific Standards and Guidance. The following quality assurance measures were applied to the development:

- Risk Analysis
- Requirements Reviews
- Design Reviews
- Testing on unit level (Module verification)
- Integration testing (System verification)
- Final acceptance testing (Validation)
- Performance testing
- Safety testing

#### Conclusion:

GE considers features of the Centricity Radiology RA600 / Centricity Cardiology CA1000 / Centricity Digital Hardcopy are equivalent to those of the predicate devices.

### Third Party Review Quality Assessment

Section 1 – Submission Information					
510(k) No.: / OC 3628 Third Party Organization: Un	derwri	ters			
Third Party's Primary Reviewer(s): Silvia Ankwa					
ODE/OIVD Division: DRAKO Branch/Team	RDO	3			
Section 2 – 510(k) Decision					
Third party recommendation: SE <u>K</u> NSE Other (specif	y):				
ODE/OIVD final decision: SE <u>L</u> NSE Other (specify):					
Section 3 - Assessment of Third Party Review					
Review Element		Rating (check one)			
	Adequate	Minor	Major		
a. Determination of device eligibility for third party review		Issuc(s)	Issue(s)		
b. Extent of pre-submission consultation with ODE/OIVD division			ļ		
c. Organization and format of review documentation					
d. Determination of 510(k) administrative completeness (screening review)			·		
e. Summary of device characteristics, intended use, and performance (including accessories, if applicable) and reason for 510(k) submission					
f. Comparison to legally marketed devices—identification and analysis of key similarities and differences					
g. Rationale for conclusions and recommendation		.,			
h. Use of guidance documents and standards					
i. Resolution of 510(k) deficiencies and FDA requests for additional information					
j. Scope of reviewer expertise and use of consulting reviewers					
k. Other (specify):	<b></b>				
Comments (explanation of ratings/issues):					

Section 4 ODE/OIVD Assessor Information

Assessed by: In a. Jamah

Date. 12 - 13 - 16 Tel. No.: 240 - 271 - 3664

Routing: Division Completed assessment (this page only) to inside front cover of 510(k).

DMC Forward this page only to Fric Rechen, POSODE, Rm. 1201, Corp. Blvd. (HEZ. 10.).



DEC 2 6 2006

Food and Drug Administration 9200 Corporate Blvd. Rockville MD 20850

GE Healthcare Integrated IT Solution % Ms. Silvia Ankova Senior Project Engineer Underwriters Laboratories, Inc. 333 Pfingsten Rd. NORTHBROOK IL 60062

Re: K063628

Trade/Device Name: Centricity Radiology RA600 / Centricity Cardiology CA1000 / Centricity Digital

Hardcopy

Regulation Number: 21 CFR 892.2050

Regulation Name: Picture archiving and communications system

Regulatory Class: II Product Code: LLZ Dated: December 5, 2006 Received: December 6, 2006

#### Dear Ms. Ankova:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the <u>Code of Federal Regulations</u>, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.



Protecting and Promoting Public Health

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

21 CFR 876.xxx	(Gastroenterology/Renal/Urology	240-276-0115
21 CFR 884.xxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 894 xxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Nancy C. Brogdon

Director, Division of Reproductive, Abdominal, and Radiological Devices

Jancy Chroadon

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

Page 1 of 1

510(k) Number (if known):

K063628;

510(k) filed on October 16, 2006

Device Name: Centricity Radiology RA600 / Centricity Cardiology CA1000 / Centricity Digital Hardcopy

Indications for Use:

RA600/CA1000/Digital Hardcopy is intended for viewing and diagnostic interpretation of images acquired from CT, MR, CR, DR, US, XA and other DICOM-compliant medical imaging systems when installed on suitable commercial-standard PC hardware. RA600 / CA1000 is intended for use as a primary diagnostic and analysis workstation in Radiology/ Cardiology or other departments. It is also intended for use as a clinical review workstation throughout the healthcare facility and may be part of a larger PACS configuration.

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(PLEASE DO NOT WRITE	BELOW THIS LINE	CONTINUE ON ANOTHER PAGE IF NEEDED)
Concurre	nce of CDRH, Office	e of Device Evaluation (ODE)
Prescription Use <u>X</u> (Per 21 CFR 801.109)	OR	Over-The-Counter Use (Optional Format 1-2-96

(Division Sign-Off)

Division of Reproductive, Abdominal,

and Radiological Devices

510(k) Number